CLAIMS

1. (Currently Amended) Droplet deposition apparatus comprising a chassis and at least first and second actuator, each actuator comprising an electrically actuable droplet ejection actuator and electrical drive circuitry to provide actuation signals to that droplet ejection actuator, wherein said chassis comprises two parallel, opposed thermal management surfaces, an internal fluid cavity situated between said thermal management surfaces such that fluid in said cavity establishes thermal contact with said surfaces and fluid ports arranged on the exterior of said chassis and communicating with said internal cavity for supply and circulation of fluid through said internal cavity; the first and second actuator being mounted respectively on the two thermal management surfaces.

2. (Currently Amended) Apparatus according to Claim 1, wherein both the droplet ejection actuator and the drive circuitry of each actuator are in thermal contact with the associated thermal management surface.

3. (Currently Amended) Apparatus according to Claim 1, wherein each droplet ejection actuator comprises a body of piezoelectric material mounted in thermal contact with the associated thermal management surface.

4. (Currently Amended) Apparatus according to Claim 3, wherein each body of piezoelectric material defines an array of droplet ejection channels and wherein the apparatus comprises a common nozzle plate which is disposed in a plane orthogonal to said thermal management surfaces and which defines a first set of nozzles for the droplet ejection channels of the first actuator and a second set of nozzles for the droplet ejection channels of the second actuator such that the mutual alignment of the first and second sets of nozzles is independent of the mutual alignment of the first and second actuator.

5. (Currently Amended) Apparatus according to Claim 1, wherein said chassis is formed of a material having a thermal conductivity greater than 1.2 W/mK.

6. (Currently Amended) Apparatus according to Claim 1, wherein said chassis is formed of a thermally conductive plastic.

7. (Currently Amended) Apparatus according to Claim 1, wherein said chassis is formed from first and second generally concave chassis parts, each chassis part defining one of the thermal management surface parts and the chassis parts combining to define said internal cavity.

8. (Currently Amended) Apparatus according to Claim 7, wherein said chassis parts are formed by molding.

9. (Original) Apparatus according to Claim 8, wherein said thermal management surfaces are machined for mutual alignment after combination of said chassis parts.

10. (Currently Amended) Apparatus according to Claim 1, wherein said internal cavity comprises a separator dividing said internal cavity into a first channel for providing thermal management for said droplet ejection actuators and a second channel for providing thermal management for said electrical drive circuitry.

11. (Original) Apparatus according to Claim 10, wherein the second channel has a greater volume than the first channel.

12. (Original) A method of manufacturing droplet deposition apparatus which comprises a chassis and at least first and second droplet ejection actuators; the method comprising the steps of:

forming a chassis with first and second parallel, opposed thermal management surfaces and an internal fluid cavity situated between said thermal management surfaces;

mounting the first and second droplet ejection actuators respectively on the first and second thermal management surfaces such that fluid in said cavity establishes thermal contact with both actuators; and

providing a common nozzle plate which is disposed in a plane orthogonal to said thermal management surfaces and which defines a first set of nozzles for the

actuator and a second set of nozzles for the second actuator such that the mutual alignment of the first and second sets of nozzles is independent of the mutual alignment of the first and second actuators.

13. (Original) A method according to Claim 12, wherein the step of mounting the first and second droplet ejection actuators respectively on the first and second thermal management surfaces serves to define the mutual alignment of the first and second actuators in the apparatus.

14. (Currently Amended) A method according to Claim 12, wherein each actuator comprises a body of piezoelectric material mounted in thermal contact with the associated thermal management surface.

15. (Currently Amended) A method according to Claim 12, wherein said chassis is formed of a thermally conductive plastic.

16. (Currently Amended) A method according to Claim 12, wherein said chassis is formed from first and second generally concave chassis parts, each chassis part defining one of the thermal management surface parts and the chassis parts combining to define said internal cavity.

17. (Currently Amended) A method according to Claim 16, wherein said chassis parts are formed by molding.

18. (Original) A method according to Claim 17, wherein said thermal management surfaces are machined for mutual alignment after combination of said chassis parts.

19. (New) Droplet deposition apparatus comprising a chassis and at least first and second actuator, each actuator comprising a body of piezoelectric material defining an array of droplet ejection channels and electrical drive circuitry to provide actuation signals, wherein said chassis comprises two parallel, opposed thermal management surfaces, an internal fluid cavity situated between said thermal management surfaces such that fluid in said cavity establishes thermal contact with

said surfaces and fluid ports arranged on the exterior of said chassis and communicating with said internal cavity for supply and circulation of fluid through said internal cavity; the first and second actuator being mounted respectively on the two thermal management surfaces, wherein both the body of piezoelectric material and the drive circuitry of each actuator are in thermal contact with the associated thermal management surface.

20. (New) Apparatus according to Claim 19, wherein the apparatus comprises a common nozzle plate which is disposed in a plane orthogonal to said thermal management surfaces and which defines a first set of nozzles for the droplet ejection channels of the first actuator and a second set of nozzles for the droplet ejection channels of the second actuator such that the mutual alignment of the first and second sets of nozzles is independent of the mutual alignment of the first and second actuation means.

21. (New) Apparatus according to Claim 19, wherein said chassis is formed of a molded plastic material having a thermal conductivity greater than 1.2 W/mK.

22. (New) Droplet deposition apparatus comprising a chassis and at least first and second actuator, each actuator comprising a body of piezoelectric material and electrical drive circuitry to provide actuation signals, wherein said chassis is formed from first and second generally concave chassis parts, each chassis part defining one thermal management surface and the chassis parts combining to define an internal fluid cavity situated between said thermal management surfaces such that fluid in said cavity establishes thermal contact with said surfaces and fluid ports arranged on the exterior of said chassis and communicating with said internal cavity for supply and circulation of fluid through said internal cavity; the first and second actuator being mounted respectively on the two thermal management surfaces with the body of piezoelectric material and the drive circuitry of each actuator being in thermal contact with the associated thermal management surface, wherein said internal cavity comprises a separator thereby dividing said internal cavity into a first channel for providing thermal management for each said body of piezoelectric

material and a second channel for providing thermal management for each said electrical drive circuitry.

23. (New) Apparatus according to Claim 22, wherein said chassis is formed of a molded plastic material having a thermal conductivity greater than 1.2 W/mK.

24. (New) Apparatus according to Claim 22, wherein the second channel has a greater volume than the first channel.